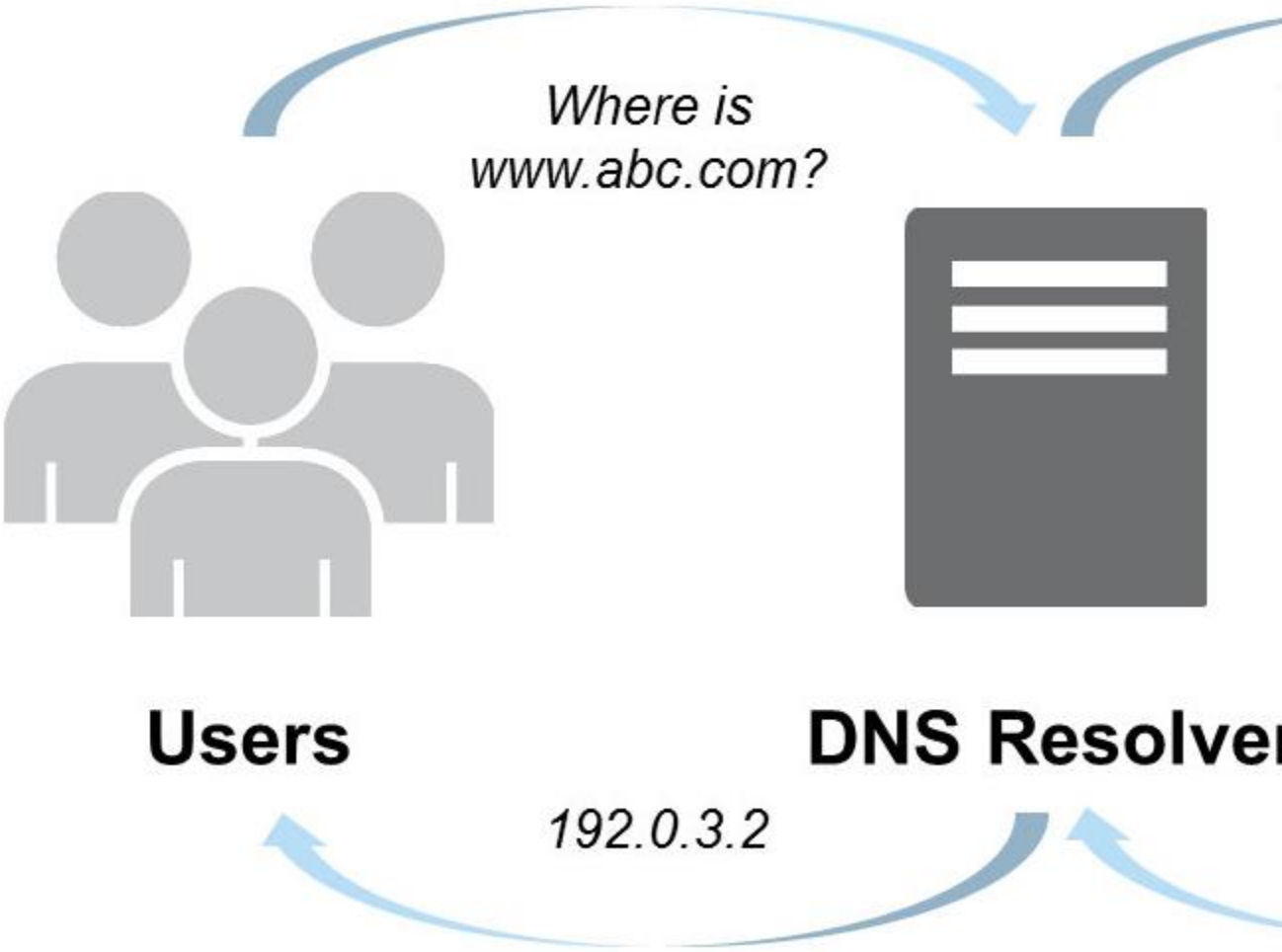
AWS DOCUMENTATION(ROUTE 53)

What is Route 53?



i)You type a website address (like "abc.com") in your browser.

ii)Route 53 acts like a phonebook, looking up "abc.com" and finding the website's secret code (IP address).

iii)Your browser uses this code to connect to the website and show it to you.

Route 53 on AWS provides DNS as a Service .

Route 53 is like an address book for Internet.

DNS is basically stands for “Domain Name System”.

In Route 53, DNS is a service that translates human-readable domain names(like google.com) into IP addresses (like 192.0.0.1) so that computers can locate and communicate with each other.

Domain Name is the human-readable address used to identify a website ,such as student.com.

Top Level Domain is the the last part of domain,like .com or .in

Authoritative Nameservers are the official servers providing website information.

Zone file is a file containing all the details about specific website’s addresses.

Records in Route 53contain instructions for routing internet traffic to our domain.

SOA (start of Authority) is acts as main manager of your domain,provides key administrative details.

Other Comman Records include:

i)A Record : Maps domain names to IP addresses.

ii)CNAME Record : Create aliases for domain name.

iii)MX Record : Specifies mail servers for receiving mails.

Records Types are the Entries in DNS records like A(address), CNAME (canonical Name), MX (mail exchange),etc. defining the different functionalities.

Hosted Zone

A hosted zone is a collection of records for a specified domain.

A hosted zone is analogous to a traditional DNS zone file; it represents a collection of records that can be managed together.

There are two types of zones:

- Public host zone – determines how traffic is routed on the Internet.
- Private hosted zone for VPC – determines how traffic is routed within VPC (resources are not accessible outside the VPC).

Amazon Route 53 automatically creates the Name Server (NS) and Start of Authority (SOA) records for the hosted zones.

Amazon Route 53 creates a set of 4 unique name servers (a delegation set) within each hosted zone.

You can create multiple hosted zones with the same name and different records.

NS servers are specified by Fully Qualified Domain Name (FQDN), but you can get the IP addresses from the command line (e.g. dig or nslookup).

For private hosted zones you can see a list of VPCs in each region and must select one.

For private hosted zones you must set the following VPC settings to “true”:

- enableDnsHostname.
- enableDnsSupport.

You also need to create a DHCP options set.

You can extend an on-premises DNS to VPC.

You cannot extend Route 53 to on-premises instances.

You cannot automatically register EC2 instances with private hosted zones (would need to be scripted).

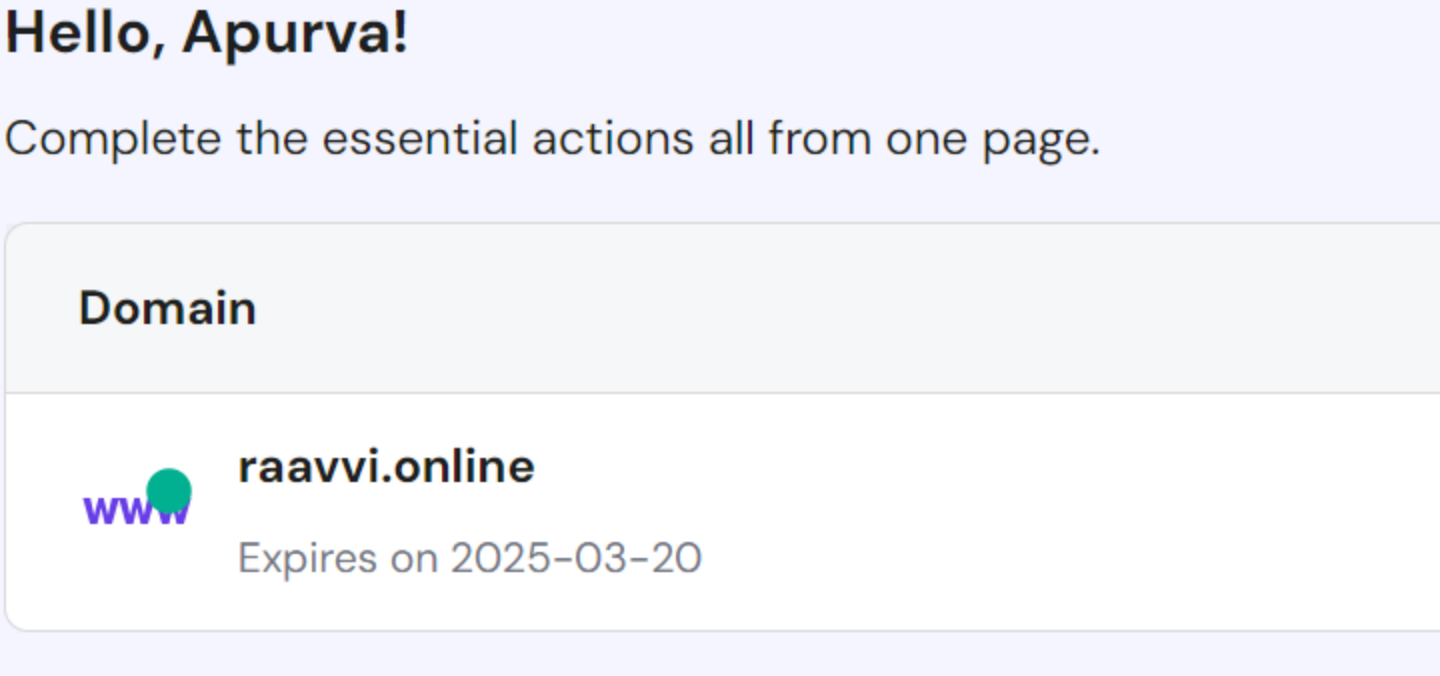
You can associate the Route 53 private hosted zone in one account with a VPC in another account.

To associate a Route 53 private hosted zone in one AWS account (Account A) with a virtual private cloud that belongs to another AWS account (Account B), follow these steps using the AWS CLI:

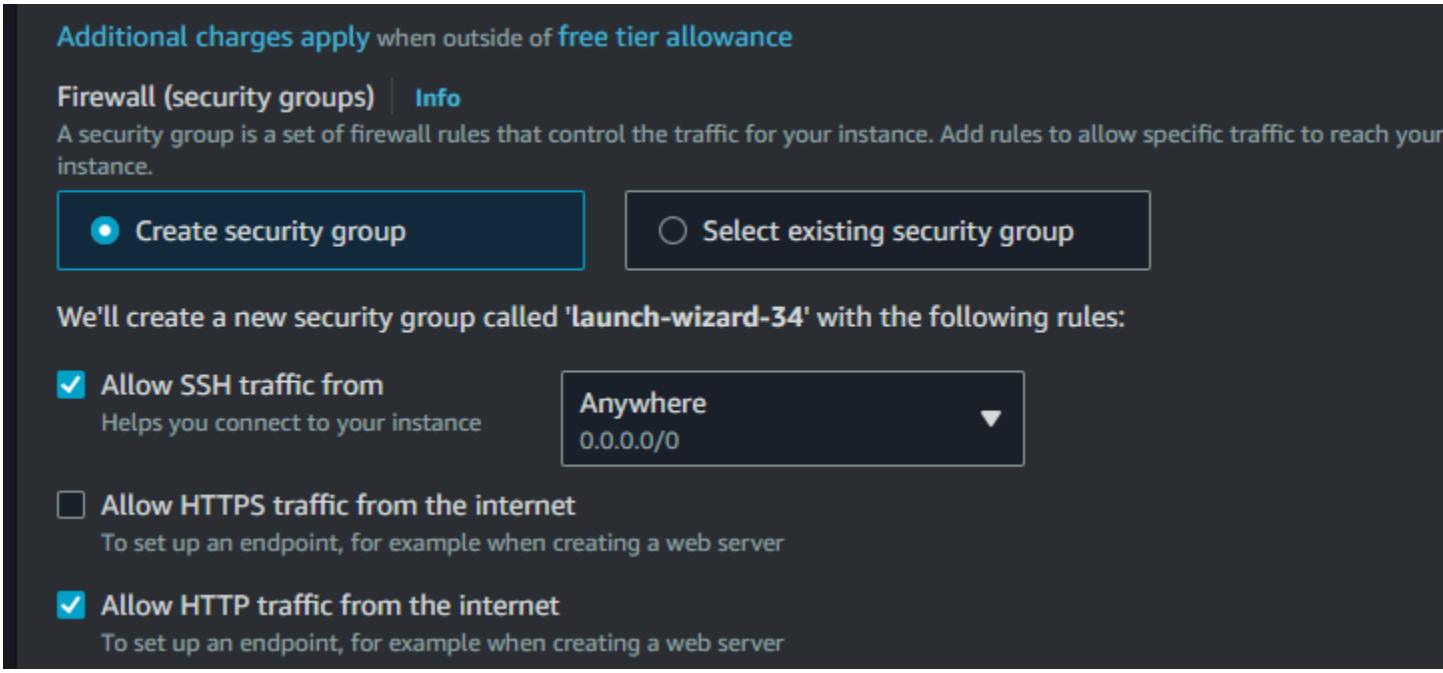
1. From an instance in Account A, authorize the association between the private hosted zone in Account A and the virtual private cloud in Account B.
2. From an instance in Account B, create the association between the private hosted zone in Account A and the virtual private cloud in Account B.
3. Delete the association authorization after the association is created.

HOSTING YOUR WEBSITE ON AWS USING ROUTE 53

Step I : go to google and search hostinger website and purchase domain name.



Step II : then create the EC2 instance with http rule added in its security group and launch it.



Step III : connect the instance.

Step IV : Install the httpd package using “yum install httpd -y”.

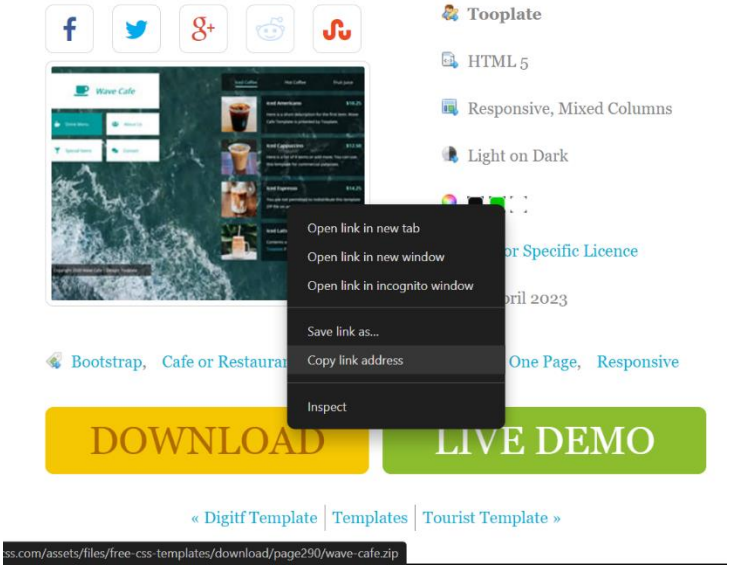
```
[ec2-user@ip-172-31-93-7 ~]$ sudo yum install httpd -y
```

i-01fc7fe70afc09398 (dns)

Step V : then start this using “systemctl start httpd”command and enable it using “systemctl enable httpd” command.

```
[ec2-user@ip-172-31-93-7 ~]$ sudo systemctl start httpd
[ec2-user@ip-172-31-93-7 ~]$ sudo systemctl enable httpd
```

Step VI : go to browser, and copy the link address to download the template.

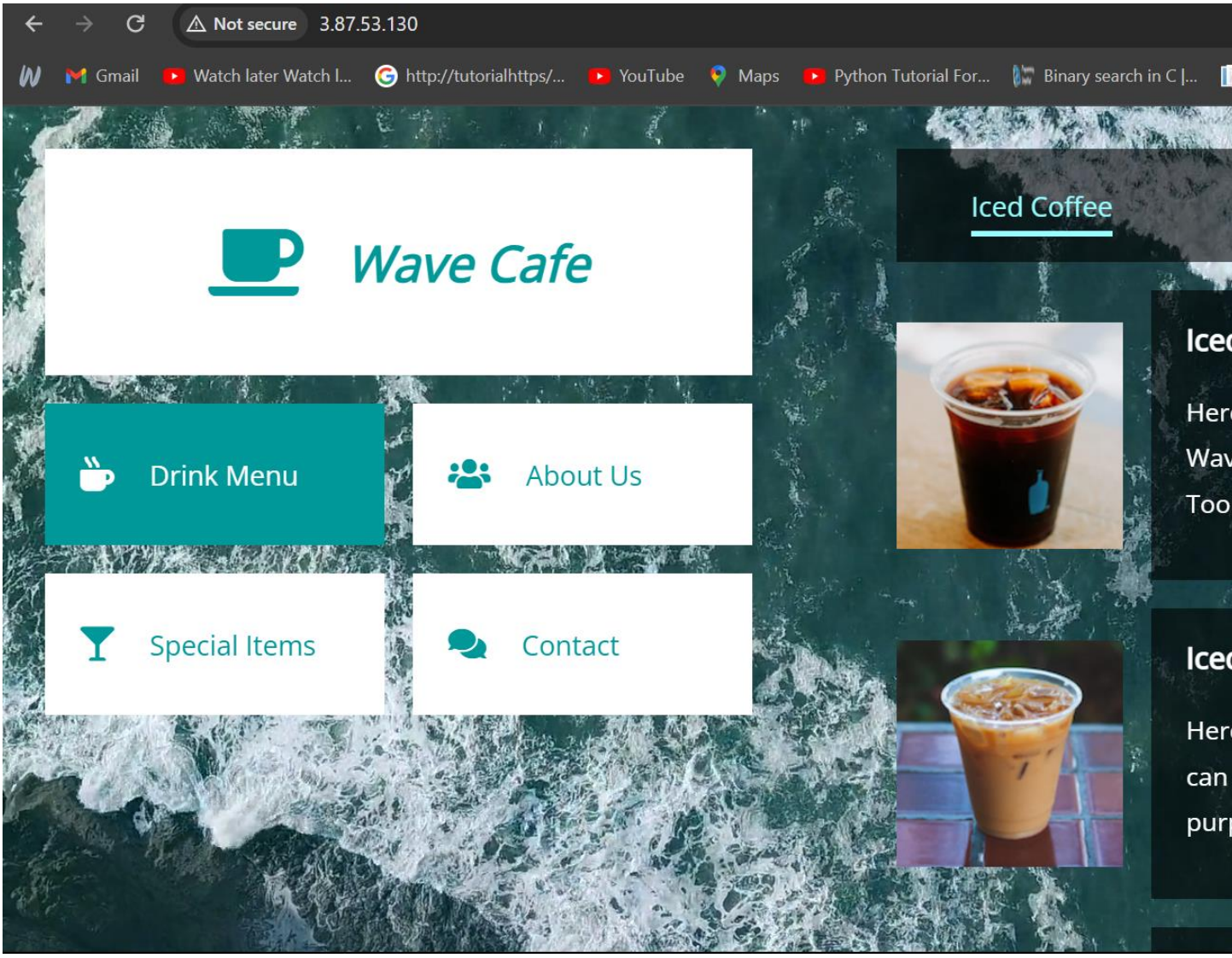


Step VII : using curl -O paste this link address.

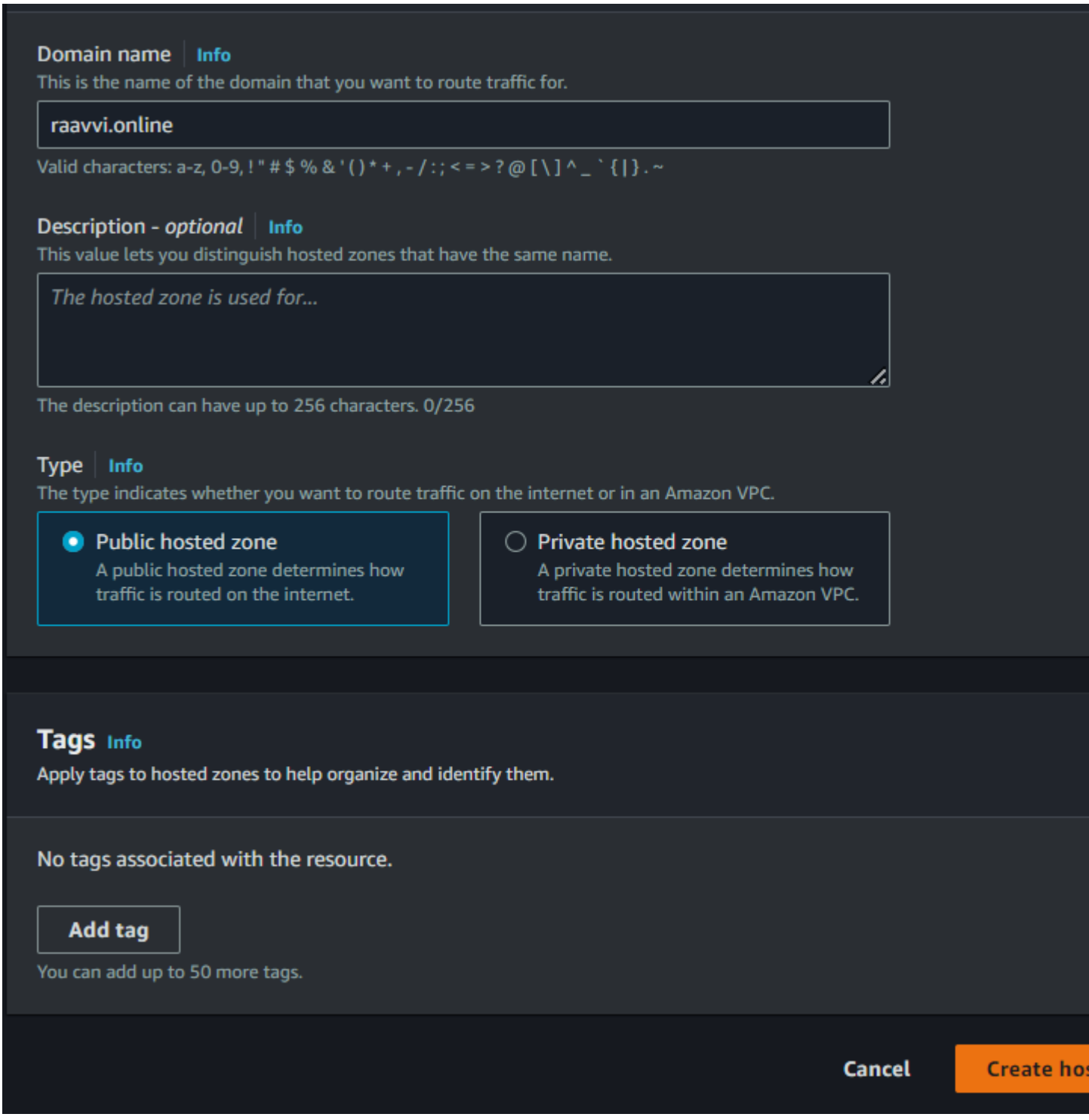
Step VIII : after downloading then unzip it using “unzip” command.

```
[ec2-user@ip-172-31-93-7 ~]$ curl -O https://www.free-css.com/assets/files/free-
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 11.3M  100 11.3M    0     0  6099k      0  0:00:01  0:00:01 --:--:-- 6098k
[ec2-user@ip-172-31-93-7 ~]$ ls
wave-cafe.zip
[ec2-user@ip-172-31-93-7 ~]$ unzip wave-cafe.zip
```

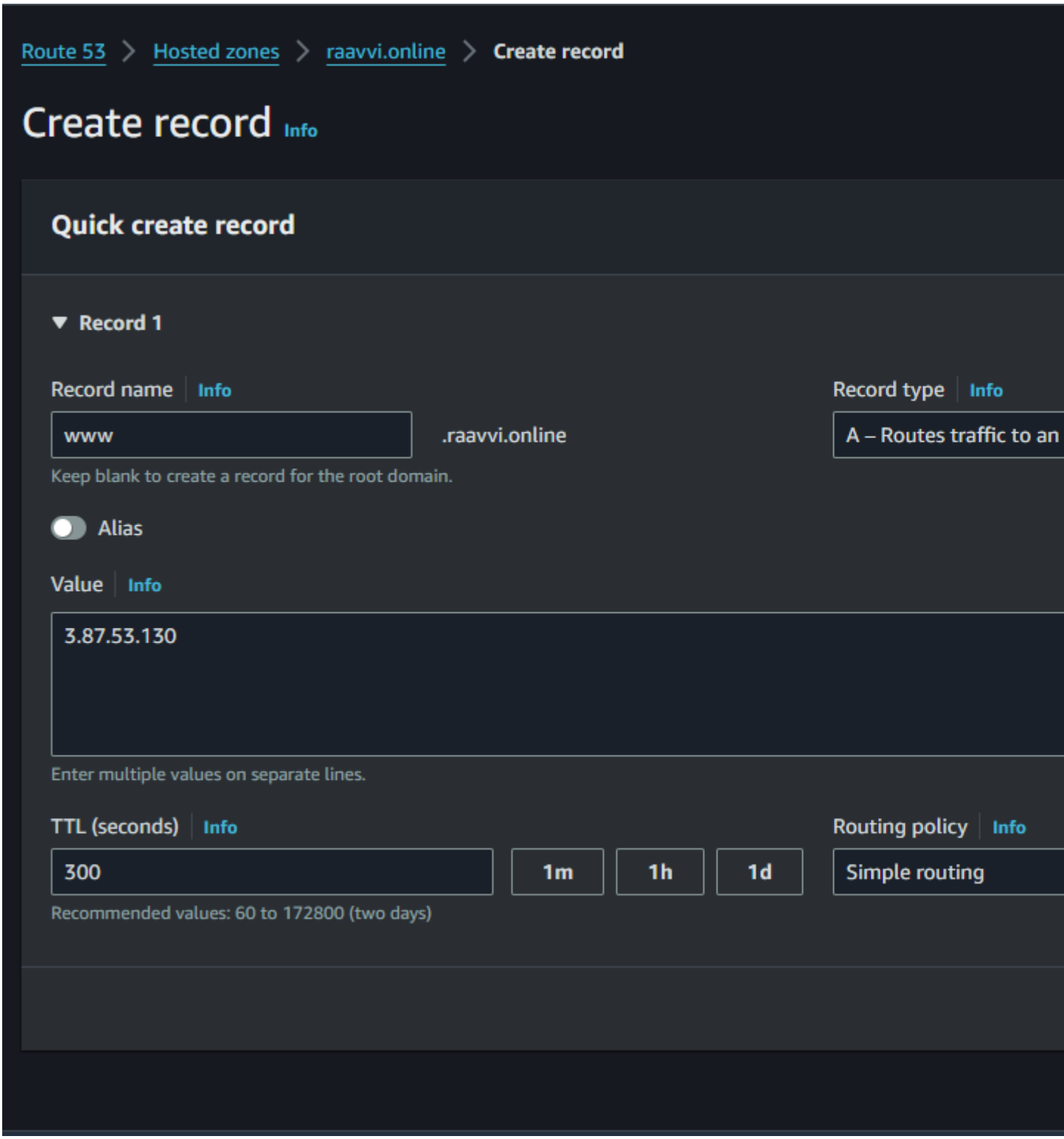
Step IX : then go to Instance, copy it's public IP and paste it in other browser.

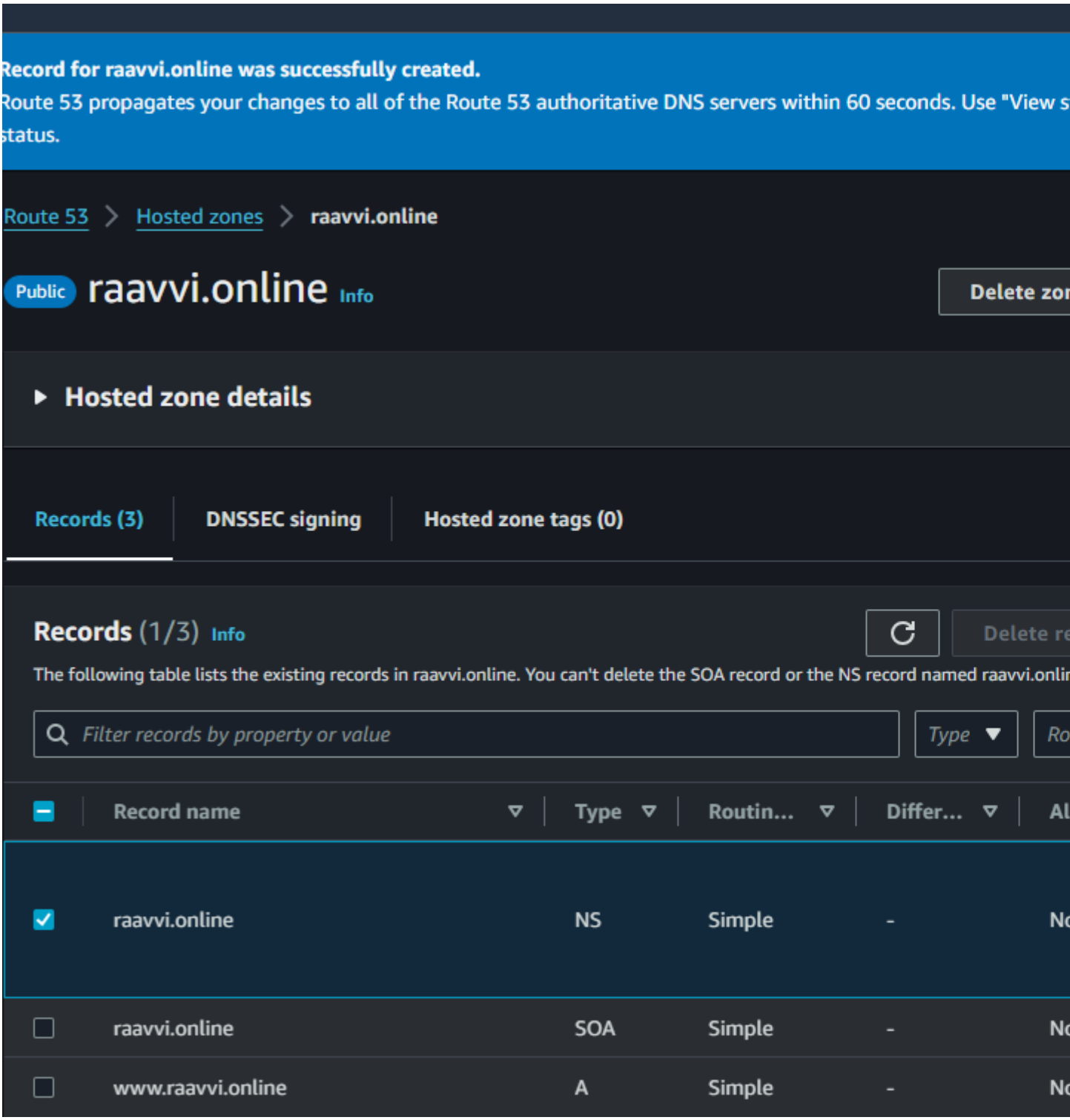


Step X : After doing that, go to route 53 service and create the hosted zone.



Step XI : then create the record in it .give it's name,IP and create it.


Route 53 > Hosted zones > raavvi.online > Create record
Create record Info
Quick create record
Record 1
Record name Info
www
.raavvi.online
Keep blank to create a record for the root domain.
Record type Info
A – Routes traffic to an
Alias
Value Info
3.87.53.130
Enter multiple values on separate lines.
TTL (seconds) Info
300
1m
1h
1d
Recommended values: 60 to 172800 (two days)
Routing policy Info
Simple routing



Step XII : then copy the name server and paste it in our hostinger and save it.

ns-64.awsdns-08.com

Select Nameservers

- ○ Use Hostinger nameservers (recommended)
- ◉ Change nameservers

ns-660.awsdns-18.net

ns-85.awsdns-10.com

ns-2002.awsdns-58.co.uk

ns-1302.awsdns-34.org

Save Cancel

Step XII : then search our domain name on browser.